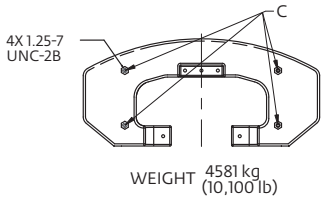
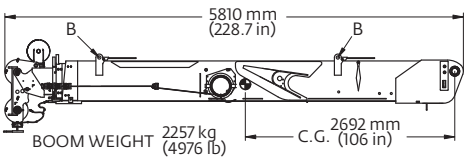
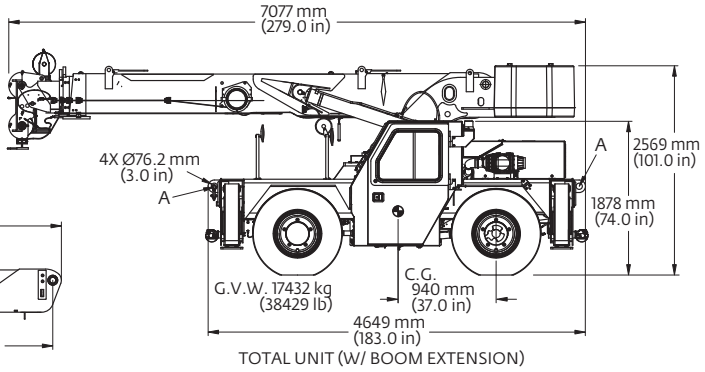
TRANSPORTATION AND LIFTING DATA

1. LIFTING OF ENTIRE CRANE OR MAJOR CRANE ASSEMBLIES MUST BE ACCOMPLISHED BY UTILIZING SPECIFIC FITTINGS INDICATED ON ADJACENT CHART. USE OF FITTINGS FOR PURPOSES OTHER THAN THOSE DESIGNATED ON CHART IS PROHIBITED. FITTING CAPACITIES ARE MAXIMUM ALLOWABLE LOADS PER INDIVIDUAL FITTING.
2. RIGGING PERSONNEL SHALL BE RESPONSIBLE FOR PROPER SELECTION AND PLACEMENT OF ALL SLINGS AND LOAD HANDLING DEVICES.
3. DIMENSIONS AND WEIGHTS SHOWN ARE ESTIMATED FOR LARGEST CONFIGURATION AVAILABLE. WEIGHTS DO NOT INCLUDE BOOM EXTENSION AND OR JIB, UNLESS OTHERWISE INDICATED.
4. RIGGING PERSONNEL SHALL VERIFY DIMENSIONS AS REQUIRED FOR CLEARANCE.
5. DO NOT USE COUNTERWEIGHT LIFT LOCATIONS OR BOOM SLING POINT FOR LIFTING OR TIE DOWN OF ENTIRE CRANE.
6. LIFTING OF THE COUNTERWEIGHT TO BE ACCOMPLISHED WITH A PROPERLY RATED 1 1/4 INCH EYEBOLT.

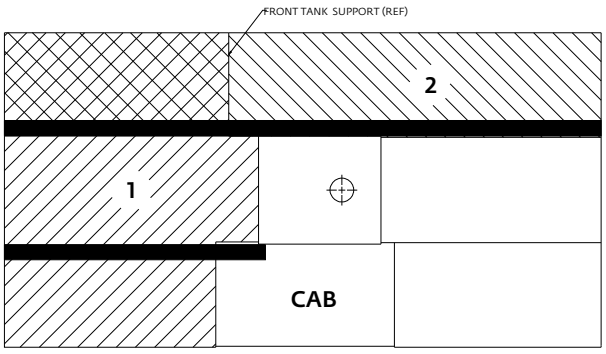
FITTING	NO. / UNIT	LIFT	TOW	TIE DOWN	BOOM LIFT	CWT LIFT	CAPACITY-TONNES [TONS] LIFT	TOW	TIE DOWN FORE & AFT	SIDE	DOWN
A	4	X	X	X			9.1 [10]	27.2 [30]	27.2 [30]	0.9 [1]	27.2 [30]
B	4				X		1.8 [2]				
C	4					X	0.9 [1]				







LOAD DISTRIBUTION FOR CARRYDECK



Maximum Allowable Uniformly Distributed Load

AREA 1
9071 kg (20,000 lb)

OR

AREA 2
4082 kg (9000 lb)

1. Maximum travel speed with any or all loads - 4.0 kmh (2.5 MPH)
2. Loads to be transported on smooth level firm surfaces only.
3. Boom must be retracted and in center forward position, and lowered as much as the load allows.
4. Pick and carry loads may be transported on either Deck Area 1 or Deck Area 2; combined loading of Deck Area 1 and Deck Area 2 not permitted.
5. Lifting is not permitted when carry deck is loaded except for loading and unloading carry deck.
6. The maximum pick and carry loads may be transported on deck area 1 provided the load is centered over the front axle and cribbed directly on the frame rails.

THIS CHART IS ONLY A GUIDE AND SHOULD NOT BE USED TO OPERATE THE CRANE.
The individual crane's load chart, operating instructions and other instructional plates must be read and understood prior to operating the crane.

WEIGHT REDUCTIONS FOR LOAD HANDLING DEVICES

OFFSETTABLE EXTENSIONS	
*Stowed	N/A
*15 ft fixed ext. erected	700 lb
*15 ft tele. ext. erected	1400 lb
*25 ft tele ext. erected	1950 lb

*Reduction of main boom capacities

When lifting over swingaway and/or jib combinations, deduct total weight of all load handling devices reeved over main boom nose directly from swingaway or jib capacity.

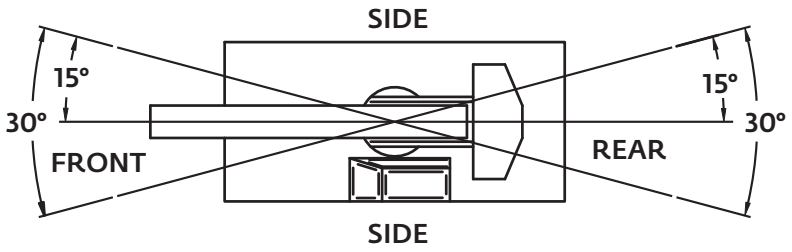
HOOK BLOCKS AND HEADACHE BALLS	
20 USt, two-sheave hook block	388 lb+
6.25 USt down haul weight	105 lb+

+Refer to rating plate for actual weight

NOTE: All load handling devices and boom attachments are considered part of the load and suitable allowances MUST BE MADE for their combined weights. Weights are for Shuttlelift furnished equipment.

TIRE INFLATION - BAR (PSI)		
SIZE (FRONT & REAR)	PLY RATING	LIFTING SERVICE, GENERAL TRAVEL &EXTENDED TRAVEL
		STATIC & 2.5 MPH
ADVANCE 12.00R20 GL073A	18	130

LIFTING AREA DIAGRAM



LINE PULLS AND REEVING INFORMATION

HOISTS	CABLE SPECS.	PERMISSIBLE LINE PULLS	NOMINAL CABLE LENGTH
Main	9/16" 6x19 class Bridon EEIPS (XXIPS) Min. breaking strength 37,000 lb	10,000 lb*	320 ft

The approximate weight of 9/16" wire rope is 0.59 lb/ft.
*With certain boom and hoist tackle combinations, the allowable line pull may be limited by hoist performance.
Refer to hoist performance table for lift planning to ensure adequate hoist performance on drum rope layer required.

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Superstructure

Boom
5,64 m – 16,61 m (18.5 ft – 54.5 ft) four-section full power boom.

Maximum tip height: 19,2 m (63 ft)

Optional boom extensions*

4,6 m (15 ft) fixed swingaway extension.
Maximum tip height: 23,1 m (76 ft)

4,6 m – 7,6 m (15 ft – 25 ft) telescopic swingaway extension.
Maximum tip height: 26,2 m (86 ft)
Both extensions can be offset 0˚, -15˚, and -30˚ via pivoting boom nose.

Boom nose
Two sheave, quick reeve type with three- pinned pivoting (0˚, +40˚, and +80˚) design to minimize head space requirements. Lowers head height 40,5 cm (1.33 ft) when nose is pivoted fully forward.

Boom elevation
Two double acting hydraulic cylinders with integral holding valve.
Elevation: 0˚ to 80˚.

Anti-two block device
Standard anti-two block device (hard wired), which, when activated, provides an audible and visual warning to the operator and "locks out" all functions whose movement can cause two-blocking.

Rated Capacity Limiter (RCL)
Full-color, graphical display of boom angle, boom length, boom radius, rated load, and calculated load. Allows for operator inputs to set the crane configuration. RCL system is hardwired and calculates load via pressure transducers in the lift cylinder. Display includes a color coded light bar and audible alarm with function cut-out if load exceeds the load chart parameters.

*Optional RCL system includes work area definition (WADS), and is datalogger capable.

Swing
Ball bearing swing circle with 360˚ continuous rotation. Worm gear and pinion driven by hydraulic motor. Spring applied, hydraulic released brake. Equipped with swing enable control.
Maximum speed: 2.5 rpm

Hydraulic system
One pressure compensated variable displacement axial piston pump, with load sensing.

Maximum output of: 155 LPM (41.0 GPM)

Maximum operating pressure: 276 bars (4000 p.s.i.)

Four-section valve bank, chassis mounted, operated via dash mounted pilot pressure hydraulic joystick controllers.

130.6 L (34.5 gal) steel hydraulic reservoir with sight level gauge and steel side plating to guard against side impact.

Return line replaceable filter with by-pass protection and service indicator. Cartridge filter rating of three micron.

Hoist specifications
Smooth drum with cable follower.

Maximum hoist pull (first layer): 63,6 kN (14,300 lb)

Maximum permissible single line pull:
44,5 kN (10,000 lb.) (3.5:1 design factor)

Maximum single line speed: 64 m/min (210 fpm)

Rope construction: 6 x 19 XXIPS / IWRC

Rope diameter: 14 mm (9/16 in)

Rope length: 97,5 m (320 ft)

Carrier

Chassis
High strength alloy frame constructed with integral outrigger housings; front and rear lifting, tie-down, and towing lugs. Deck carrying capacities of 9071 kg (20,000 lb) or 4082 kg (9000 lb). Deck coated with anti-skid treatment.

Outriggers
Single stage hydraulic telescoping beam with oblique style jack cylinder on all four corners. Provides extended and down and retracted and down lifting capabilities. Integral holding valve on both beam and jack.

Outrigger positioning indicator located in dash display.

Outrigger pad size: 222 mm x 254 mm (8.75 in x 10 in)

Maximum outrigger pad load: 15 468 kg (34,100 lb)/ 401 p.s.i.

Outrigger controls
Independent outrigger control rocker switches for beam or jack selection with a separate extend /retract rocker selector switch. 360˚ level bubble located inside cab.

Engine (Tier IV)
Cummins QSF 3.8L Tier 4F four-cylinder/turbo-charged diesel rated at 97 kW (130 hp) at 2500 rpm. Includes standard 120V engine block heater and air intake "Grid" heater. Engine hour meter located in dash display. Alternator: 135 amp. Maximum Torque: 488 Nm (360 ft/lb) at 1600 rpm. Fuel requirements: Maximum of 15 ppm sulphur content Requires "Ultra Low" diesel fuel.

NOTE: Tier IV required for sale in North America.

Engine (Tier III)
Cummins QSF 3.8L Tier III four-cylinder/turbo-charged diesel rated at 97 kW (130 hp) at 2500 rpm. Includes standard 120V engine block heater and air intake "Grid" heater. Engine hour meter located in dash display. Alternator: 135 amp. Maximum Torque: 489 Nm (361 ft/lb) at 1600 rpm.

NOTE: Required for sale outside of North America and European Union countries.

**Denotes optional equipment*

Specifications

Engine (Dual Fuel)
KEM 4.3L V-6 gasoline 90 HP @ 2200 rpm / LP gas engine (07 EPA) 87 HP @ 2200 rpm (LP tank not included) with engine shutdown feature.

Fuel tank capacity
Steel with side impact plate. Capacity: 151,4L (40 gal).

Carrier

Transmission
Powershift with four speeds forward and four reverse. Steering column mounted shifter.

Operators control station
Frame mounted, open air style control station with cab shell includes all crane functions and driving controls and equipped with overhead safety glass. Other standard equipment includes a suspension seat with seat belt, sight level bubble and 1,1 kg (2.5 lb) fire extinguisher, and tilt steering wheel. The dash panel will display the fuel level gauge, water temperature gauge, engine r.p.m., battery voltage, and hour meter. Indicator lights will display parking brake, low transmission pressure, low brake pressure, outrigger position, headlights, work lights (if ordered), and hoist 3rd wrap (if ordered). Crane function indicator and turn signal indicators are also included. The RCL display will be mounted on the top of the dash panel for direct line of sight for the operator.

*Operators control station enclosed
Includes the standard cab shell and all controls and indicators noted above, with the addition of front, rear, and right side glass, a split (two-piece) hinged door with sliding glass, front windshield wiper and washer, hot water heater and defroster with fan and cab dome light.

Electrical system
One heavy duty maintenance free 12V battery, 820CCA at 0˚F.

Drive
Two-wheel (front-wheel) as standard with four-wheel drive as an option. Drive axles supplied with planetary hubs and limited slip differential.

Steer
Standard three steering modes.
Front (two-wheel), four-wheel coordinated, and
four-wheel crab steer with electronic self alignment.
Three position rocker switch located on dash panel.

Outside Turning Radius:
Two wheel steer: 6,05 m (19.84 ft)
Four wheel steer: 3,8 m (12.46 ft)

Suspension/axles
Front: Drive / steer in both two-wheel drive and four-wheel drive
Rear: non-drive with steer in two-wheel drive, drive/steer in four-wheel drive.

Front axle is rigid mounted to frame. Rear axle offers 1.5˚ of oscillation.

Brakes
Hydraulic actuated internal wet-disc service brake acting on each drive wheel. Dash mounted rocker switch with indicator light for activating or release of the dry disc parking brake mounted on the transmission output yoke.

Tires
Tubeless type, semi-aggressive tread. 12.00 R20

Light
Full LED lighting includes turn indicators, head, tail, brake, and hazard warning lights recessed mounted.

Maximum speed
33,8 km/h (21.0 mph)

Gradeability (theoretical)
68% ... (to drive train stall) NO LOAD
40% ... (to drive train stall) with 9072 kg(20,000 lb) DECK LOAD

Gross vehicle weight (GVW)
Open cab: 16504 kg (36,386 lb) with Tier IV Final
Enclosed cab: 16 594 kg (36,583 lb) with Tier IV Final

Miscellaneous standard equipment
- Back-up motion alarm
- Outrigger motion alarm
- No-skid decking
- Front and rear lifting
- Towing
- Tie-down lugs
- Hoist third wrap indicator with hoist function cut-out
- Hoist drum rotation indicator

*Optional equipment
- Auxiliary lighting: includes cab mounted amber flashing light and dual base boom mounted LED work lights
- Convenience package: includes front and rear pintle hitch, dual rear view mirrors, head and tail light metal mesh grille covers
- Enclosed cab package: includes heater and defroster, cab dome light, all window glass, and two-piece split door
- Four-wheel drive
- Below deck hydraulic tow winch with 4536 kg (10,000 lb) capacity
- 4,6 m (15 ft) fixed boom extension
- 4,6 m – 7,6 m (15 ft – 25 ft) telescopic boom extension
- Air conditioning (closed cab option required)
- 360˚ swing lock

**Denotes optional equipment*

Symbols glossary


Axles


Counterweight


Grade


Outriggers


Boom


Drive


Heavy duty jib


Radius


Boom elevation


Electrical system


Hoist


Rotation


Boom extension


Engine


Hookblock


Speed


Boom length


Extension


Hydraulic system


Steering


Boom nose


Frame


Lights


Suspension


Brakes


Fuel tank capacity


Oil


Swing


Cab


Gear


Outrigger controls


Tires


Transmission